

WHAT IS CLAIMED IS

1. An electronic device for generating and displaying an item of information, including a flexible body shaped to be able, for example, to be secured to a user's wrist, an electronic unit for generating the information, at least a display cell for displaying said information, and an electric power source for powering the electronic unit, wherein the flexible body has, at at least one location on its length, an overthickness of material forming a rigid receptacle in the inner cavity of which is arranged said electronic unit.

2. An electronic device according to claim 1, wherein the electric power source is further arranged in the rigid receptacle.

3. An electronic device according to claim 1, wherein the flexible body includes in succession a flexible reinforcing layer forming the bottom of the electronic device, in which is arranged the receptacle intended to accommodate the electronic unit and, if required, the electric power source, a flexible printed circuit having a bottom face and a top face respectively turned towards the reinforcing layer and towards the top of the electronic device, the electronic unit and the electric power source being secured to the bottom face of the flexible printed circuit, while the display cell is arranged on the top face of said flexible printed circuit, and a flexible protective layer covering the flexible printed circuit.

4. An electronic device according to claim 3, wherein the printed circuit is secured to the reinforcing layer by means of a thin film of adhesive or by means of a thin layer of liquid adhesive material, and in that the protective layer is bonded or hot pressed onto the flexible printed circuit.

5. An electronic device according to claim 1, wherein the electronic unit and, if required, the electric power source, arranged in the rigid receptacle of the flexible body, are embedded in an encapsulation resin which is put into the conditions necessary for it to transform into a solid insulating adhesive material.

6. An electronic device according to claims 1, wherein the flexible body is made of at least one of the following flexible materials: cardboard, paper or plastic.

7. An electronic device according to claim 6, wherein the flexible body includes at least one of the following flexible plastic materials: ABS, polyamide, polycarbonate, polyester, polyethylene terephthalate, polyimide, polypropylene, polyurethane or silicon.

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8. An electronic device according to claims 1, wherein the electronic unit includes at least one integrated circuit suited to the type of information to be elaborated and displayed.

5 9. An electronic device according to claim 8, wherein the electronic unit further includes a time base circuit formed by a quartz resonator element and a frequency divider, as well as counters which supply the integrated circuit with time-related information in response to the signals supplied by the time base circuit.

10 10. An electronic device according to claim 8, wherein the electronic unit includes, in addition to the integrated circuit intended to elaborate the information to be displayed, at least a control circuit intended to control the display cell.

11. An electronic device according to claim 1, wherein the electric power source is a battery or a rechargeable accumulator.

12. An electronic device according to claim 11, wherein the accumulator is recharged from the exterior of said electronic device.

15 13. An electronic device according to claim 11, wherein the accumulator is recharged by a flexible solar cell.

14. An electronic device according to claim 1, wherein the flexible display cell includes at least one liquid crystal cell.

20 15. An electronic device according to claim 14, wherein the liquid crystal cell includes two plates which delimit it and which surround the liquid crystal layer, these two plates being formed by thin films of flexible plastic material.

16. An electronic device according to claim 15, wherein the liquid crystal cell is of the PDLC type.

25 17. An electronic device according to claim 14, wherein the liquid crystal cell is formed by a layer of electronic ink formed by capsules which are dispersed in a binding material and which enclose a liquid crystal or an electrophoretic material.

18. An electronic device according to claim 1, wherein it includes means for manually modifying the information to be displayed.

30 19. An electronic device according to claim 18, wherein the means for manually modifying the information to be displayed includes at least one touch key.

20. An electronic device according to claim 19, wherein the touch key is controlled by a control circuit which belongs to it and which checks, at regular intervals of time, whether said touch key has been activated by the user.

35 21. An electronic device according to claim 19, wherein it includes at least one push-button which controls the activation and deactivation of the touch keys.

22. An electronic device according to claim 21, wherein the push-button, arranged towards the interior of the rigid receptacle of the reinforcing layer, is made in

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a single piece with said receptacle and is set back with respect to the outer surface of the latter.

23. An electronic device according to claim 22, wherein the push-button includes a stem connected to the receptacle by a flexible portion which exerts a resilient return force on the stem.
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24. An electronic device according to claim 23, wherein the flexible portion has the shape of circular skirt which is directly connected to the receptacle and completely surrounds the stem.

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